

WHAT IS CLAIMED IS:

1. A pattern formation method comprising the steps of:
forming a resist film made from a chemically amplified resist material;
performing pattern exposure by selectively irradiating said resist film with
5 exposing light while supplying, onto said resist film, a solution that includes an acid
generator for generating an acid through irradiation with light; and
forming a resist pattern by developing said resist film after the pattern exposure.
2. The pattern formation method of Claim 1,
wherein said solution is water.
- 10 3. The pattern formation method of Claim 1,
wherein said solution is perfluoropolyether.
4. The pattern formation method of Claim 1,
wherein said acid generator is an onium salt.
5. A pattern formation method comprising the steps of:
forming a resist film made from a chemically amplified resist material;
15 performing pattern exposure by selectively irradiating said resist film with
exposing light while supplying, onto said resist film, a solution including an acid; and
forming a resist pattern by developing said resist film after the pattern exposure.
6. The pattern formation method of Claim 5,
wherein said solution is water.
- 20 7. The pattern formation method of Claim 5,
wherein said solution is perfluoropolyether.
8. The pattern formation method of Claim 5,
wherein said acid is acetic acid.
- 25 9. A pattern formation method comprising the steps of:

forming a resist film made from a chemically amplified resist material;
forming, on said resist film, a water-soluble film including an acid generator for
generating an acid through irradiation with light;
performing pattern exposure by selectively irradiating said resist film with
5 exposing light while supplying a nonaqueous solution onto said water-soluble film; and
forming a resist pattern by developing said resist film after the pattern exposure.

10. The pattern formation method of Claim 9,

wherein said nonaqueous solution is perfluoropolyether.

11. The pattern formation method of Claim 9,

10 wherein said acid generator is an onium salt.

12. The pattern formation method of Claim 9,

wherein said water-soluble film is a polyvinyl alcohol film or polyvinyl
pyrrolidone film.

13. A pattern formation method comprising the steps of:

15 forming a resist film made from a chemically amplified resist material;

forming, on said resist film, a water-soluble film including an acid;

performing pattern exposure by selectively irradiating said resist film with
exposing light while supplying a nonaqueous solution onto said water-soluble film; and

forming a resist pattern by developing said resist film after the pattern exposure.

20 14. The pattern formation method of Claim 13,

wherein said nonaqueous solution is perfluoropolyether.

15. The pattern formation method of Claim 13,

wherein said acid is acetic acid.

16. The pattern formation method of Claim 13,

25 wherein said water-soluble film is a polyvinyl alcohol film or a polyvinyl

pyrrolidone film.

17. A pattern formation method comprising the steps of:

forming a resist film made from a chemically amplified resist material;

forming, on said resist film, a water-soluble film including an acid polymer;

5 performing pattern exposure by selectively irradiating said resist film with

exposing light while supplying a nonaqueous solution onto said water-soluble film; and

forming a resist pattern by developing said resist film after the pattern exposure.

18. The pattern formation method of Claim 17,

wherein said nonaqueous solution is perfluoropolyether.

10 19. The pattern formation method of Claim 17,

wherein said acid polymer is polyacrylic acid or polystyrene sulfonic acid.